

Overview

Working Capital Fund Concept

“Working capital funds are revolving funds within DoD which finance organizations that are intended to operate like commercial businesses. Income (or budgetary resources) derived from the sale of goods and services are used to finance the defense working capital fund (DWCF) business areas’ continuing operations without fiscal year limitations. Unlike profit-oriented commercial businesses, DWCF businesses strive to reach break-even prices charged to customers. Revenue from customers sustains the full cost and the continuous cycle of DWCF business operations.

These business units ‘sell’ goods or services to internal DoD ‘customers’ at a price necessary to recover the total cost incurred to provide those goods and services. Working capital fund business units finance their operations with cash from the revolving fund; the revolving fund is then replenished by payments from the business units’ customers.”

Defense Systems Management College¹



¹Source: DSMC Acquisition Logistics Guide—Life Cycle Costs (LCC) (www.dsmc.dsm.mil/educdept/lmdeptresources/papers/chap13.doc) and DSMC Financial Management Terms (www.dsmc.dsm.mil/courses/crsdesc/bcf-103/fmtermstn.doc)

Overview

Air Force Working Capital Fund (AFWCF)

The Air Force Materiel Command (AFMC) accounts for more than 95 percent of Air Force working capital fund (AFWCF) revenue and expense activity (excluding the transportation working capital fund, managed by the United States Transportation Command). The AFWCF consists of three activity groups—supply management, depot maintenance and information systems. Supply Management supports major Air Force goals and mission-essential tasks by providing inventory management for spare parts and associated logistics support services to fulfill United States Air Force (USAF) needs during war and peacetime. Depot Maintenance provides economical and responsive repair, overhaul, and modification of aircraft, missiles, engines, other major end items, and their associated components. The Information Services business area provides for the maintenance and development of automated information systems for specific activities of the Air Force, Department of Defense (DoD), and other Government agencies.

Working capital funds (WCFs) allow the Air Force to:

- ▶ Establish strong customer/provider relationships
- ▶ Identify the total cost of providing support products and services



- Focus management attention on net results, including costs and performance
- Ensure readiness through reduced support costs, stabilized rates, and customer service.

Funding Authority

The Office of the Under Secretary of Defense (Comptroller) (OUSD(C)) through the Assistant Secretary of the Air Force (Financial Management and Comptroller) (SAF/FM) allocates to activity groups their annual cost authority. Unit cost targets provide standards for managing cost per unit of output, established during the budget process by dividing the projected total program/product cost by the projected units of measurable output. Specific capital investment targets are established to support the replacement and modernization of equipment and other capital assets through the budget, obligation, and procurement processes.

Rates

Established rates are set to recoup full costs with adjustments made for prior year gain or loss. Therefore, during the year of execution there are stabilized rates. The scope of costs paid by AFWCF activities and passed to customers in rates and prices has been refined to represent more accurately the full costs of goods and services.

Mission Impact

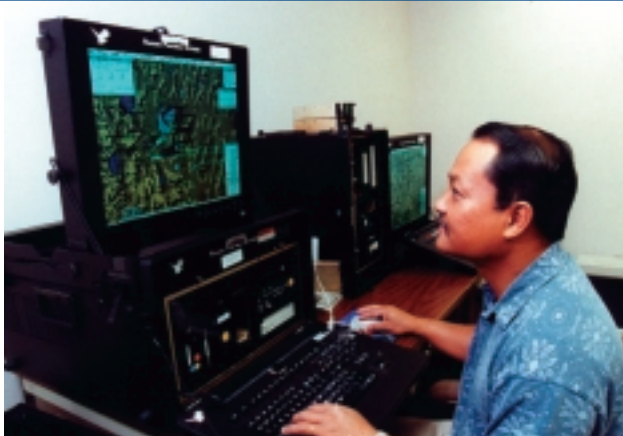
The trends reflected in key operational and financial business performance indicators (BPIs) gauge the impact of AFWCF

support on Air Force mission capability. These indicators also are the key measure to assess performance under the Government Performance and Results Act (GPRA). Key operational BPIs include the following:

- Material Support Division (MSD) Retail Issue Effectiveness**—The percentage of occasions in which Base Supply is able to issue a serviceable part once an order is placed, regardless of stock level authorizations.
- MSD Retail Stockage Effectiveness**—The percentage of occasions in which Base Supply is able to issue a serviceable part once an order is placed for items authorized a stock level.
- Depot Maintenance Activity Group (DMAG) Depot Maintenance Aircraft Delivery Performance**—The percentage of aircraft delivered from depot maintenance on or before negotiated delivery dates.

Key financial BPIs measure the effectiveness of AFWCF resource management. Typical measures include:

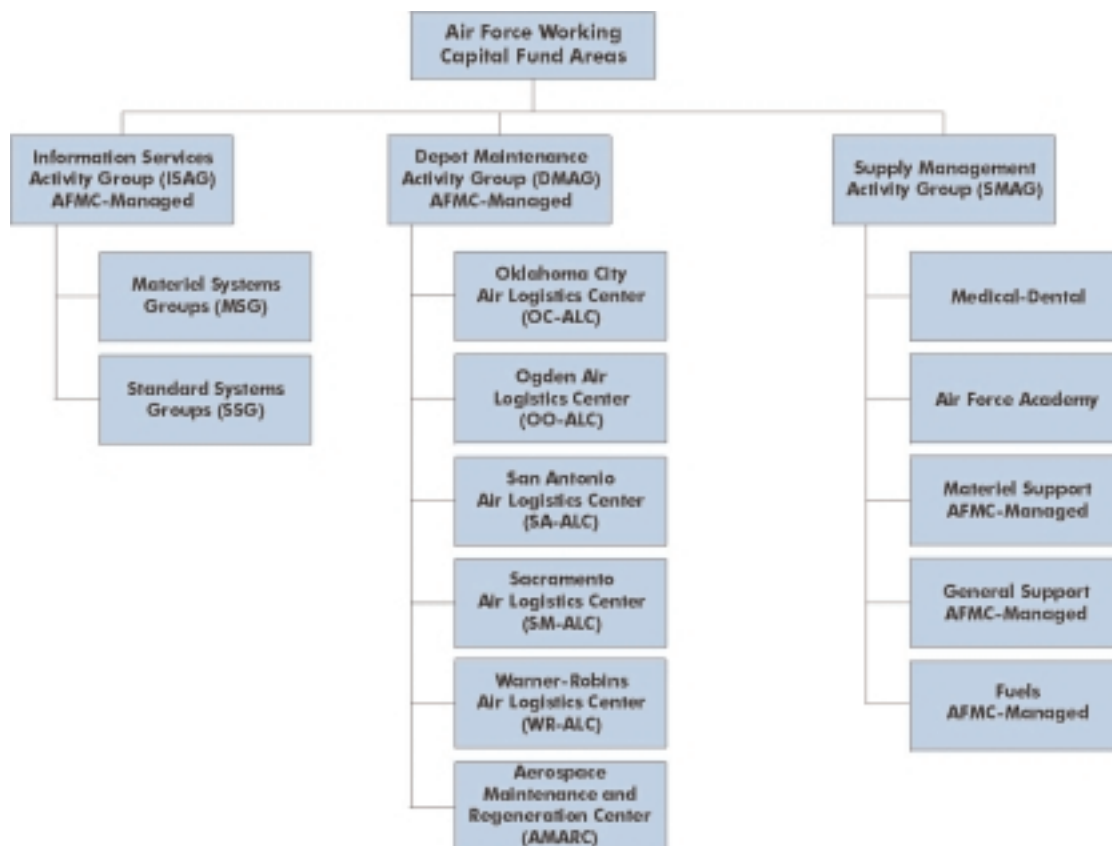
- Net Operating Results (NOR)**—NOR is calculated by taking the difference between revenue and expenses. It is a bottom-line profit and loss indicator.
- Unit Cost Target (UCT)**—UCT is a target performance indicator measuring projected resources consumed versus projected output. It is actual unit cost compared against target unit cost.



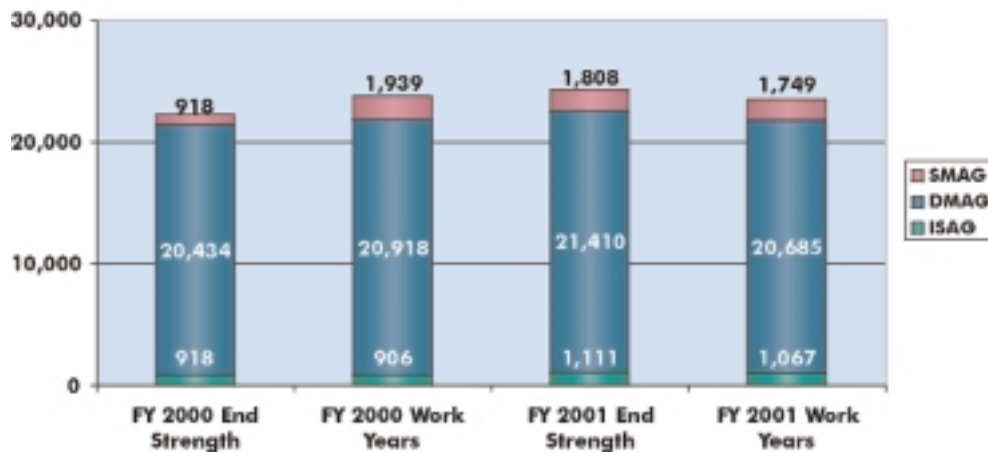
Overview

Air Force Working Capital Fund Organization

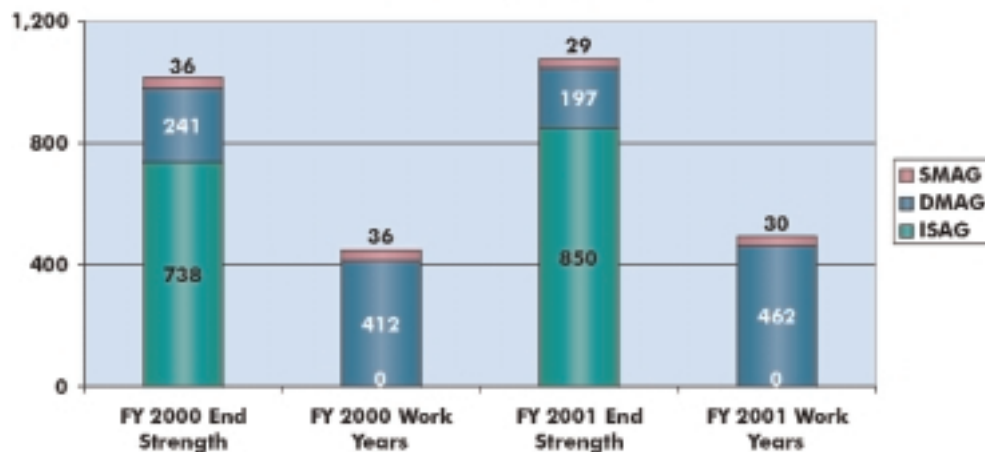
Air Force Working Capital Fund Activity Groups and Divisions



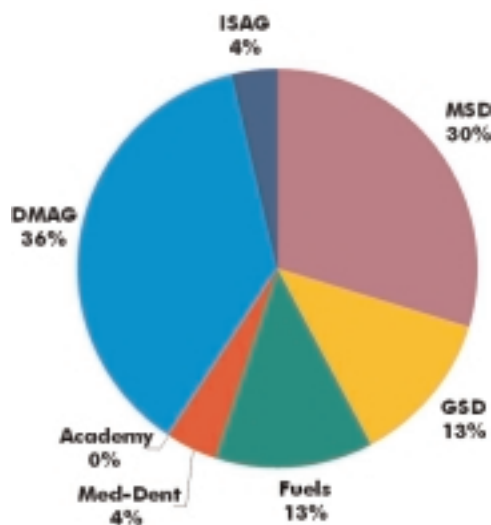
AFWCF Civilian Personnel



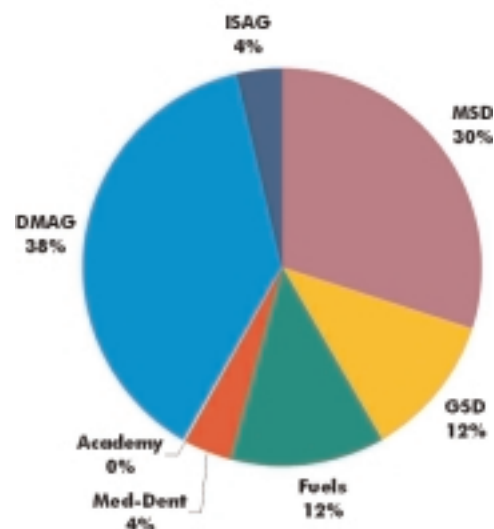
AFWCF Military Personnel



Revenue for FY 2001



Expenses for FY 2001





Supply Management Activity Group

The Supply Management Activity Group (SMAG) was established to provide inventory management for spare parts and associated logistics support services to fulfill USAF needs during peacetime and wartime. SMAG acquires and repairs inventory items using funds received from prior sales. The activity group pays operating costs using revenue from sales.

Mission Statement

The mission of SMAG is to provide policy, guidance, and resources to meet Air Force needs for spare parts during war and peace. SMAG manages approximately two million items including weapon systems spare parts, medical/dental supplies and equipment, and items used for non-weapon systems applications. Materiel procured from vendors held in inventory is for sale to authorized customers.

SMAG consists of five divisions: the Materiel Support Division (MSD), General Support Division (GSD), Fuels Division (FD), Medical/Dental Division, and Air Force Academy Cadet Issue Division. The Air Force Materiel Command (AFMC) manages the MSD and GSD. The United States Air Force Headquarters (HQ USAF) manages the Medical/Dental Division and Air Force Academy Cadet Issue Division. Beginning in FY 2002, Headquarters Defense Logistics Agency/Defense Energy Service Center assumes management of the Fuels Division.

MSD is responsible for Air Force-managed, depot-level reparable spare parts and consumable spares. The principal

products of MSD are serviceable spare parts/assemblies unique to Air Force weapon systems. The sale of reparable parts represents about 90 percent of total sales. The remainder represents sales of nonreparable or consumable items within the MSD. Although most consumable items are transferred to the Defense Logistics Agency (DLA) for management, items designated as weapon system-critical remain on the AFMC product list.

GSD items support installation maintenance and administrative functions, field and depot maintenance of aircraft, ground and airborne communication and electronic systems, and other sophisticated systems and equipment. These items also include individual clothing items issued to new recruits; organizational clothing items, such as firemen's protective overgarments; and air crew helmets and chemical warfare protective overgarments. GSD supports more than 150 Air Force installations throughout the world.

Aviation, ground, and missile fuels categories comprise the Fuels Division. The Fuels Division supplies aviation and ground fuels to the Air Force Air National Guard, Air Force Reserve Command, and other Department of Defense and Government agencies; commercial enterprises; foreign governments; and commercial operations. The missile fuels category supports the National Aeronautics and Space Administration (NASA), Air Force space launch programs, and commercial space launch programs, in addition to the customers named above.

The Surgeon General of the Air Force is responsible for the overall management of the Medical/Dental Division. This peacetime operating authority provides the effective support necessary to maintain established norms in the health care of USAF active military, retirees, and their dependents. The war reserve materiel (WRM) requirement of this division is to provide medical supplies and equipment vital to support forces in combat and contingency operations.

The Air Force Academy Cadet Issue Division finances the purchase of uniforms, uniform accessories, and computers for sale to cadets. The division's customer base includes more than 4,000 cadets who receive distinctive uniforms procured from a number of domestic manufacturing contractors.

Customers, Products, and Services

In addition to the management of parts, the Supply Management Mission Area (SMMA) provides a wide range of logistics support services, including requirements forecasting, item introduction, cataloging, provisioning, procurement, repair, technical support, data management, item disposal, distribution management, and transportation.

SMMA provides support to a variety of customers. In FY 2001, the customer base consisted primarily of the following:

- ▶ Air Force Major Commands (MAJCOMS) (47 percent of sales)
- ▶ AFMC depot maintenance and contractors (25 percent of sales)
- ▶ Air National Guard and Air Force Reserves (12 percent of sales)

- ▶ Other military services within the DoD, other agencies within the Federal Government, and foreign military sales (FMS) (16 percent of sales)

All customers pay for supply services at the same full-cost recovery rate. In addition to providing normal resupply, the supply business also provides initial provisioning support to the Air Force Acquisition Executive.

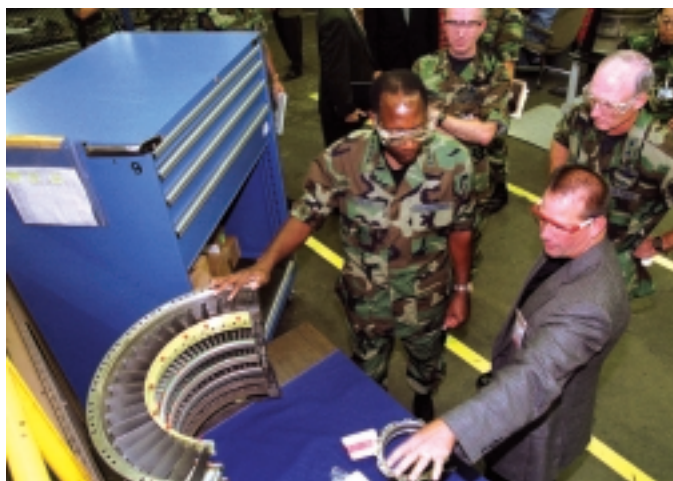
Performance Measures

Supply Management Highlights

SMAG saw continued improvements in most of its customer support and financial metrics during FY 2001. The activity group met or exceeded most of its FY 2001 goals in its key business performance indicators (BPIs). Due in large part to SMMA's continued supply chain manager (SCM) initiatives, the Constraints Analysis Programs (CAP), the Contract Repair Process (CRP), and the Depot Repair Enhancement Program (DREP), SMAG continued to improve its support to the warfighter.

The SCM mission area initiatives aim at integrating key business processes that support the flow of products, information, and money to improve the efficiency of the supply pipeline. They also seek to identify and resolve constraints. This year the SMMA initiated a Workload Planning (WP) study at Warner Robins ALC. The WP team used two forecasting tools: Demand Solutions and the Execution and Prioritization of Repair Support System (EXPRESS). The study showed that by proactively inducting and producing a limited number of traditionally high-demand items, greater production efficiencies were realized, resulting in better support to the war fighter. The purpose of the CRP and DREP is to enhance the repair





capability of both organic depot and contract repair facilities by determining the best use of people, parts, and funds to fill demands.

The SMMA continued to see improvement for its customer support performance indicators in FY 2001. Since FY 1998, SMMA has witnessed steady improvement in Issue and Stockage Effectiveness, Logistics Response Times, and Backorder Reduction Efforts. While the FY 2001 results were improvements over FY 2000, the SMMA fell short of reaching the challenging FY 2001 targets set by its SCMs in May 2000. The FY 2001 highlights include:

Backorders—The SMMA's impressive backorder reduction trend continued. The number of MSD units backordered was reduced from 263,026 to 252,012 in FY 2001. However, this was short of the FY 2001 goal of 238,000 units. Backorder reduction was well on its way to meeting the goal, averaging 245,000 units for the last six months of the year, but the events at the close of the year generated many additional backorders as organizations prepared for operations NOBLE EAGLE and ENDURING FREEDOM.

Logistics Response Time (LRT)—The SMMA met its FY 2001 reduction goal, finishing the year at 35.7 days, just under the targeted 36 days. The cumulative average for the year was 36 days. There was considerable fluctuation from month to month, ranging from a high of 42.8 days to a low of 31.8 days. This is not unusual, nor is it necessarily negative as LRT often increases as older backorders are filled.

SCM Tool Development—In FY 2001, SMMA continued to develop and refine its web-based tools to assist the SCMs and their customers in tracking and analyzing performance.

- This year SMMA added the Mission Capable (MICAP) Analysis & Reporting Tool (MART) to its "SCM Toolbox." The MART allows SMMA personnel to stratify MICAP hours and incidents by ALC, SCM, weapon system, MAJCOM, cause code, and condition code as well as identifying those National Stock Numbers (NSNs) with the highest number of MICAP hours. This allows the SCM to identify the major drivers of MICAP hours.

Issue Effectiveness (IE) and Stockage Effectiveness (SE)—While IE improved from FY 2000, increasing from 59 percent to 60 percent, the SMMA fell short of its FY 2001 goal of 63 percent. The SMMA experienced a slight decline in its SE performance, dropping from 70 percent in FY 2000 to 69 percent in FY 2001. These mixed results are the product of a diverse realm of factors that include inexperience in setting the goals, resulting in overly optimistic forecasted results, as well as limiting factors for depot production, including capacity, carcass, and parts shortages.

MICAP Hours—The SMMA began tracking MICAP hours as a metric in FY 2001. During this year, the number of MICAP hours was significantly reduced from 5.1 M to 4.2 M hours.

SCM-based Target Setting—Acknowledging that each SCM manages unique items with particular supply chain issues, problems, and concerns, the AFMC and Logistics Business Board (LBB) tasked each SCM to set their own targets for

each of the four operational BPIs tracked by SMAG. In May 2000, each SCM developed their own targets for MSD back-orders, LRT, issue effectiveness, and stockage effectiveness. In turn, Air Force Materiel Command (Logistics) (AFMC/LG) used these individual targets to set new Air Logistics Center (ALC) and AFMC strategic targets through FY 2006.

Financial Measures

Financial Success

Collectively, SMAG exceeded its FY 2001 goals for unit cost target (UCT) and net operating result (NOR), with each division meeting its target.

Net Operating Result

The NOR is the difference between revenue and expenses, or a bottom-line profit and loss indicator. The objective of the Supply Management Mission Area is to break even over a two-year budget cycle. This is done by setting rates that offset the prior year net profit or loss. The MSD NOR for FY 2001 was a \$193 million gain, \$96 million above our budgeted NOR gain of \$97 million.

For the General Support Division, the FY 2001 NOR goal was a loss of \$62.9 million, to return past profits to the customer, but the actual result was a profit of \$22.9 million. The increase in NOR was driven by higher-than-planned adjustments for physical inventory.

Unit Cost Target

UCT is a limitation imposed by the Office of the Under Secretary of Defense (Comptroller) on the annual operating budget (AOB), restricting obligations to a percentage of gross sales. The AOB is the funding document providing the authority to incur costs. The UCT is determined by dividing costs by sales. Another description is the ratio of obligations to gross sales. A definition for costs is an obligation (excluding initial and capital expenses) and credit returns.

Theoretically, SMAG should aim for a unit cost target ratio of 1:1, meaning a break-even point where sales equals costs. Programmed and achieved by each MSD Center in FY 2001 is actual UCT of 1.053.

SMAG Financial Business Performance Indicators (BPIs)

Financial BPI Goal	MSD FY 2001 Goal	GSD FY 2001 Goal
Revenue	4,729,000,000	1,800,600,000
Expenses	4,667,000,000	1,863,800,000
Net Operating Result (NOR)	62,000,000	(63,200,000)
Unit Cost Target (UCT)	1.047	1.000

Financial BPI Results	MSD FY 2001 Results	GSD FY 2001 Results
Revenue	\$4,740,000,000	\$1,760,400,000
Expenses	\$4,547,000,000	\$1,737,500,000
Net Operating Result (NOR)	\$193,000,000	\$22,900,000
Unit Cost Target (UCT)	1.053	1.039

Financial BPI FY 2002 Goal	MSD FY 2002 Goal	GSD FY 2002 Goal
Revenue	\$5,498,000,000	\$1,938,200,000
Expenses	\$5,407,000,000	\$1,928,500,000
Net Operating Result (NOR)	\$91,000,000	\$9,700,000
Unit Cost Target (UCT)	0.960	1.000

Goals and Initiatives—Efforts to Improve Financial Management

Inventory Valuation

A predominant driver in the Defense Finance and Accounting Service (DFAS) and Air Force reporting differences involves the valuation of SMAG's extensive inventory. Currently, the Air Force is using Latest Acquisition Cost (LAC) for valuing inventory. A complex adjustment using an approved spreadsheet based on the Office of the Secretary of Defense (OSD) model permits the proper recording of the inventory at historical

value on the financial statements. The Air Force has elected to change to the historical method of Moving Average Cost (MAC). The change in method will ensure the inventory value is auditable, and it will provide better management visibility to the SCM. An additional issue the Air Force is addressing is the matching principle for expenses to revenue generated. The Air Force is studying the commercial practice of applying an obsolescence or usage factor over time to match the expense to the expected revenue. Throughout FY 2001, the Air Force addressed the proper application of this concept.

MSD Business Performance Indicators (BPIs)

Customer Support BPI	FY 2001 Goal	FY 2001 Result	FY 2002 Goal
Issue Effectiveness (IE)	63 percent	61 percent	63 percent
Stockage Effectiveness (SE)	72 percent	69 percent	71 percent
Logistics Response Time (LRT)	36 days	36 days	36 days
Backorder Reduction	238,200 units	252,012 units	221,600 units
MICAP	No Goal	4,200,000 Hours	3,900,000 Hours

Depot Maintenance Activity Group

The Depot Maintenance Activity Group (DMAG) was established to provide economical and responsive repair, overhaul, and modification of aircraft, missiles, engines, other major end items, and their associated components.

DMAG provides a wide range of specialized services to the DoD as well as other U.S. and foreign agencies.

Mission Statement

DMAG provides major overhaul and repair of systems and spare parts while striving to meet or exceed required standards for quality, timeliness, and cost. In peacetime, DMAG enhances readiness by efficiently and economically repairing, overhauling, and modifying aircraft, engines, missiles, components, and software to meet customer demands. During wartime or contingencies, repair operations surge and capacity is realigned to support the warfighter's immediate needs.

Both AFMC depots and contract operations perform repairs and overhauls. Customers pay for a depot maintenance repaired item when it is needed. Depot maintenance operates on the funds received through selling its products and services. Less than one percent of the activity group's annual budget comes directly from funds authorized by Congress.

Customers, Products, and Services

Depot maintenance supports a variety of customers. DMAG's single largest customer is the Supply Management Activity Group (SMAG), which generates approximately 44 percent of its total revenue. The components repaired for supply management replenish spare parts to the Air Force supply chain. Approximately 48 percent of depot maintenance revenue comes directly from work performed for the major commands, the Air National Guard (ANG), and Air Force Reserve Command (AFRC). The balance of work comes from other services, Government agencies, and foreign countries.

The overhaul of airframes and engines is driven by a planned timetable or number of cycles. Repairs also are made to individual components routed from the field. Repairs are made to missiles and ground electronic systems through scheduled and unscheduled maintenance. AFMC depots provide extensive software capability for developing or modifying software used in operating weapon systems, as well as diagnostic software. Finally, DMAG provides storage, reclamation, and regeneration for equipment not currently used by the active forces of all military services, at the Aerospace Maintenance and Regeneration Center at Davis-Monthan AFB, Arizona.

Depot Workload Strategy

Depot maintenance is a critical element of USAF's overall warfighting capability. Air Force experience, from Desert Storm through ENDURING FREEDOM, continues to reaffirm that organic depots are essential to Air Force air and space power. The current depot posture has been influenced by the downsizing of our operational force; the reduction of our organic infrastructure; the introduction of new technologies; and recent depot legislative changes. To maintain a ready and controlled source of depot maintenance, the Air Force is preparing a Long Term Depot Maintenance Plan for submission to the Office of the Secretary of Defense (OSD) and Congress in 2002.

The overarching objective of this plan is to ensure that Air Force equipment is safe and ready to operate across the whole range of events, from training to supporting major the-

ater wars (MTW) and small scale contingencies (SSC).

Partnering with private industry is a key element of the Air Force plan and provides the best-value approach to supporting the warfighter. Leveraging the best of public and private capabilities ensures the Air Force will continue to provide focused support to the warfighter by taking advantage of what each does best. Partnering is the method by which the Air Force will bring in technologies to support core capability requirements in the future. In addition, the Air Force will be able to efficiently utilize its facilities and provide critical support to the warfighter.

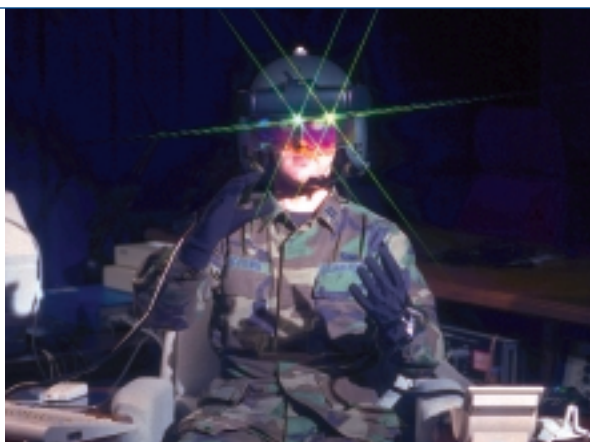
The Air Force Long-Term Depot Maintenance Plan provides military strength by ensuring the possession of an organic "core" capability sized to support all potential military operations. It will be a living document and will posture the USAF's organic depots to continue supporting the warfighter for the next 20 years.

Organization of Depots

Three principal ALCs and the Aerospace Maintenance and Regeneration Center (AMARC) at Davis-Monthan AFB, Arizona, provide DMAG organic services.

Air Force organic depot maintenance sites include:

- ▶ Ogden Air Logistics Center (OO-ALC); Ogden, Utah
- ▶ Oklahoma City Air Logistics Center (OC-ALC); Oklahoma City, Oklahoma





- ▶ Warner Robins Air Logistics Center (WR-ALC); Warner Robins, Georgia
- ▶ AMARC; Tucson, Arizona.

Cost Reduction Strategies

The following steps will further reduce the cost of depot maintenance:

- ▶ Hiring Industrial Engineering Technicians to review depot maintenance standards and processes. This will ensure accurate costs are used in budgets.
- ▶ Hiring Production Management Specialists (PMSs) at the Centers to improve the contract depot maintenance program. This plan compares material financial performance from FY 1998 (the year before additional PMSs were hired) to performance through the current period. Preliminary results show favorable savings initiatives.
- ▶ Directly shipping materials from the vendor to the depots, reducing inventory and improving vendor relations.
- ▶ Eliminating equipment no longer needed due to workload consolidations, thereby reducing depreciation costs.

Depot Maintenance Manager (DMM)

The goal of the Depot Maintenance Manager (DMM) is to achieve accountability at the lowest level in depot maintenance. The DMM is typically the Product Directorate Chief, who is responsible for the day-to-day management of repair,

maintenance, and modifications to weapon systems and materials assigned to a Directorate. This also includes the management of organic production accomplished within the Directorate's Resource Control Centers (RCCs) and directorate-managed contract production.

DMMs must ensure that their portion of the mission area stays within its revenue and expense goals while executing customer requirements. Each DMM is responsible for meeting schedules and quality goals, as well as identifying, tracking, and controlling costs.

Systems Development

Depot Maintenance Accounting and Production System (DMAPS)

AFMC's implementation of DMAPS substantially improves the financial management and reporting of organic Depot Maintenance. It provides AFMC with the capability to capture actual and planned direct material, as well as direct labor at the task level, for daily reporting purposes. It also applies overhead and general and administrative expenses on a planned dollar rate per direct labor hour. This gives managers an opportunity to review production costs at the task level on a daily basis. DMAPS enables AFMC to move closer to Chief Financial Officer (CFO) and Cost Accounting Standards (CAS) compliance. Other benefits include:

- ▶ Standard DoD financial reporting system
- ▶ Fully automated billing process

- ▶ Reduction of legacy systems
- ▶ Consolidated fund control process.

DMAPS impacts all organic DMMA employees, especially those in the production, material, financial, and customer order/funding processes at the ALCs. DMAPS also influences the Defense Finance and Accounting Service (DFAS) in Denver, Colorado.

DMAPS is expected to become operational in the third quarter of 2002 at the Ogden ALC. Implementation at Warner Robins and Oklahoma City ALCs is ongoing.

Contract Depot Maintenance Accounting and Production System

CMAPS will monitor all contract actions resulting in the production and shipment of contract end items. The system also will provide data and reports that assist the AFMC sustainment community in managing government furnished material (GFM). A new process within GFM is the establishment of validated Bills of Material (BOM) for each contract end item utilizing GFM. CMAPS will track actual material as well as its cost. The system also will provide visibility of both end items and GFM to the sustainment community.

A new area under development within CMAPS is government furnished equipment (GFE). The system monitors GFE at the Contract Number and Contract Facility level in addition to: National Stock Number (NSN), Part Number, Nomenclature, Serial Number, Acquisition Amount, Date Installed,

Depreciation Life, Remaining Depreciation Life, and Accumulated Depreciation.

Workforce

The following objectives are part of AFMC's Workforce Shaping Study to acquire and sustain the human resources necessary to support DMAG. The overall objective is to achieve a trained and flexible workforce, possessing the appropriate mix of skills and expertise to accomplish the command's mission. Details of this command-wide effort are available at <https://www.afmc-mil.wpafb.af.mil/HQ-AFMC/DP/2005/>, and a summary follows:

- ▶ By FY 2002, develop the command human resources management processes required to provide the appropriate quality and quantity of employees to support the command mission.
- ▶ Use the processes to assemble and deploy a workforce by FY 2007 to achieve the FY 2009 command objectives.
- ▶ By FY 2004, ensure that civilian and military forces obtain the experience, education, and training necessary to support the command mission. Develop and implement programs, policies, and formal career paths designed to encourage career broadening, multi-skill experiences, and functional and managerial training (e.g., Career Program Education and Training Plans, Developing Acquisition Leaders Program).



DMAG Mission Performance Measures

To measure compliance with the DMMA objectives, Business Performance Indicators (BPIs) that assess cost, schedule and quality of DMMA output are used. These BPIs are designed to achieve accountability at the appropriate depot maintenance level, the DMM.

Ten metrics represent the performance effectiveness of DMAG. Four are Financial Effectiveness Measures and six are Performance Effectiveness Measures.

Financial Effectiveness Measures

The DMAG Financial Effectiveness Measures are: (a) Net Operating Result (NOR), which is a computation of revenue minus cost of goods sold; (b) Revenue, which is the income received from customers for goods or services provided by depot maintenance; (c) Cost of Goods Sold, which measures the cost incurred to produce a given quantity and mix of products and/or services; and (d) Expense Rate, which compares planned and actual Cost of Goods Produced.

DMAG Financial Business Performance Indicators (BPIs)

Financial Performance Measures FY 2000 Goal	DMAG FY 2001 Goal	DMAG FY 2001 Result	DMAG FY 2002 Goal
Net Operating Result (NOR)	(\$14,300,000)	(\$28,200,000)	\$209,868,000
Revenue	\$5,626,100,000	\$5,633,200,000	\$6,214,868,000
Cost of Goods Sold	\$5,640,400,000	\$5,661,400,000	\$6,005,000,000
Organic Expense Rate	146.19	149.71	161.63

Net Operating Result

The Net Operating Result (NOR) is the difference between Revenue and Cost of Goods Sold. In business terms, this is the profit or loss from annual operations. The variance of actual from target NOR is one of the most important indicators of the effectiveness of business operations. The DMAG FY 2001 NOR was a loss of \$28.2 million, compared to a planned loss of \$14.3 million.

Revenue

Actual revenue for FY 2001 was \$7.1 million higher than anticipated, totaling \$5,633.2 million versus \$5,626.1 million planned.

Cost of Goods Produced

The Cost of Goods Produced measures the costs incurred during the production of a given quantity and mix of products and services. The total cost of goods produced was \$21.0 million higher than planned for FY 2001. To support workload transitioning from the closing Centers, contract depot maintenance performed more work and incurred increased costs.

Organic Expense Rate

The total expense rate was 2.4 percent higher than planned. The material expense rate was 0.7 percent over the end-of-year plan. The labor expense rate was 4.4 percent over the end-of-year plan. More overtime and higher than planned production overhead labor drove this variance.

Performance Effectiveness Measures

BPIs assess cost, schedule, and quality of the DMMA output. These BPIs are designed to achieve accountability at the appropriate depot maintenance level, the Depot Maintenance Manager. They measure compliance with DMMA objectives.

The DMAG Performance Effectiveness Measures are:

- (a) Organic Production Hours [Direct Product Standard Hours (DPSH)], which depicts how well the DMAG supported its planned production output
- (b) Days Held Index (Aircraft), which tracks delivery performance against the initial Aircraft and Missile Maintenance Production/Compression Report (AMREP) date

- (c) Aircraft Due Date Performance, which portrays schedule effectiveness
- (d) Total Aircraft Quality Defect Rate, which measures the quality of the completed work by the operating unit possessing the aircraft
- (e) Engine Quality Rate, which measures the quality of engine production
- (f) Exchangeable Quality Defect Rate, which measures the quality of the completed exchangeable by the operating unit.

DMAG Performance Effectiveness Measures

Performance Effectiveness Measures	FY 2001 Goal	FY 2001 Result	FY 2002 Goal
Organic Production Hours (DPSH)	22,478,000	21,723,000	21,838,000
Days Held Index (Aircraft)(yr.)	1.0	1.1	1.0
Aircraft Due Date Performance	90 percent	71 percent	90 percent
Total Aircraft Quality Defect Rate*	0.1 Defects	0.3 Defects	0.1 Defects
Engine Quality Rate	95 percent	98 percent	95 percent
Exchangeable Quality Defect Rate	97 percent	98 percent	97 percent

*Defects per aircraft produced

Organic Production Hours

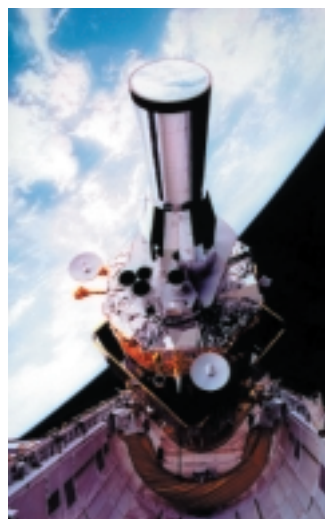
Production hours (planned and actual) are expressed in Direct Product Standard Hours (DPSH) and Direct Product Actual Hours (DPAH). This represents the number of labor hours planned and used in the production effort. Management compares monthly actual DPSHs to monthly planned DPSHs to determine efficiencies. Production Hours are reviewed monthly.

Results for FY 2001

Planned Organic Production Hours were 22,478,000.

Actual Organic Production Hours equaled 21,723,000. Total production hours for the command finished the year below plan by 700,000 hours, or approximately 3 percent under plan. An explanation of the variance is provided by group:

Aircraft commodity group closed out the year 296,000 hours above plan due to a solid recovery. Steady improvements were made on the C and KC-135 production carry-over work. Process improvements that overcame the double wing drop problems resulted in a positive variance for the F-16 aircraft of 94,000 DPSH, or 5.2 percent.



Exchangeable commodities were below plan throughout the year due to lack of parts, lack of an experienced labor force, test station downtime, commodity equipment problems, process qualification issues, and a reduced engine schedule.

Software production was below target by 98,000 hours due to manpower shortages at OC, OO, and WR.

Days Held Index (Aircraft)

The purpose of this metric is to determine the length of time the depot or depot maintenance contractor possesses an aircraft for maintenance or modifications. Total actual flow days divided by total planned flow days yields the index.

Acceptable performance is a Days Held Index of less than the Air Force standard of 1.0.

Looking at the Days Held Index for the past 12 months, increases and decreases notwithstanding, the overall trend (variance between planned and actual flow days) throughout the year was above the standard. This difference between the index and standard is consistent with the Aircraft Due Date Performance measure. This measure indicates the effect of delays in aircraft production for both organic and contract.

Aircraft Due Date Performance

Aircraft Due Date Performance measures the ability of the Air Logistics Centers and depot maintenance contractors to produce aircraft according to schedule. This includes all factors, which may not be within their control (e.g. weather, parts,

availability of flight crews, engineering evaluations, etc.). The measure tracks organic and contract aircraft by mission design series (MDS) and measures aircraft produced against either the initial or adjusted schedule, but not both. Aircraft produced early and on time, divided by the total aircraft produced equals the Due Date Performance. The thresholds for early, on-time, or late production are: Early—produced more than 5 days prior to scheduled out date; On-time—produced on scheduled out date \pm 5 days; and Late—produced more than 5 days after scheduled out date.

Annual production results for FY 2001 were: 1099 total aircraft produced, 778 (71 percent) On Time/Early.

Primary drivers for late aircraft were over and above maintenance related to structural and fuel problems (C-135, C-5), torque deck panels (C-5), and queuing problems due to double wing drops for cracked wing fingers (F-16). In addition, post-dock maintenance, functional check flight problems (both on the ground and in the air), parts, manpower, facility constraints, and fuel problems contributed significantly to delivery problems.

Total Aircraft Quality Defect Rate

The Total Aircraft Quality Defect Rate is an index of the number of defects found by the owning units of an aircraft returned from Programmed Depot Maintenance (PDM). The meaning is expressed as an average of defects per aircraft.

Engine Quality Rate

The Engine Quality Rate measures the ability of the depot to produce engines that are defect-free for use by USAF customers. This measure shows the long-term quality trend of engines delivered to the customer. The standard Engine Quality Rate was achieved 10 out of the previous 18 months. The defect rate trend has remained relatively constant over the past 12 months, a significant achievement considering the turmoil associated with transitioning repair workload to new locations and facilities.

Exchangeable Quality Defect Rate

The Exchangeable Quality Defect Rate measures the ability of the depot, both organic and contract, to produce components that are defect-free and ready for use by the customer. This rate also measures the long-term quality trend of components delivered to the customer. The exchangeable quality rate is determined by dividing total exchangeable defects reported by total exchangeable produced. The defect rate trend has decreased slightly over the past 12 months. In addition, exchangeable production increased during the year.

Goals and Initiatives—Efforts to Improve Financial Management

DMMA objectives flow to the AFMC Strategic Plan. DMMA objectives are expressed as Depot Maintenance Mission Essential Tasks.

Depot Maintenance Mission-Essential Task 1: Provide organic and contract depot repair capability for fielded and emerging weapon systems.

- (a) Objective 1: Meet end item delivery commitments 90 percent of the time by the end of FY 2005, commensurate with the adjusted schedule (AMREP date). Exchangeable delivery commitments are based on the flow day metric.
- (b) Objective 2: Ensure technically compliant operations across all product lines.
- (c) Objective 3: Manage controllable costs (labor and other) to meet or beat the rate of DoD inflation.
- (d) Objective 4: Ensure consideration of new and existing weapon systems/technologies during the biennial core assessment to retain a viable organic core capability in the future.
- (e) Objective 5: Continue development, implementation, and execution of partnering agreements to support sustainment strategies and to integrate the partnering agreement implementation methodology into the Depot Maintenance Strategy by the end of FY 2002.
- (f) Objective 6: Meet or exceed Net Operating Result goals by managing costs each year.
- (g) Objective 7: Drive accepted quality defect rates to .03 per exchangeable item, according to individually established





Model Design (MD) and Engine Aircraft Type Model (TM) defect rates.

- (h) Objective 8: Improve DMMA budget forecasting, budgeting, and execution processes by forecasting within 1 percent of: (a) total revenue; (b) cost of goods sold; (c) expenses; and 2 percent of direct product standard hours (DPSHs) produced versus center targets. Budget for 100 percent of new customer orders is generated from the Annual Workload Review.

Depot Maintenance Mission-Essential Task 2: Ensure the ability to rapidly respond to user requirements driven by contingency operations.

Objective: Develop short-term and long-term strategies by the end of FY 2002 to implement the depot maintenance strategic plan. Ensure the strategies provide the workload capacity and capability to meet depot maintenance:

- (a) peacetime support
- (b) surge requirements
- (c) core requirements by end of FY 2005.

Information Services Activity Group (ISAG)

The Information Services Activity Group (ISAG) was established to develop and maintain automated information systems for specific Air Force, DoD, and other Government

agencies. Central design activities (CDAs) develop and implement new applications, maintain and modify existing programs, provide training and documentation, and customize off-the-shelf software based on customers' specific needs.

Mission Statement

ISAG's mission is to develop, acquire, sustain, integrate, modernize, and secure combat support information systems for USAF and DoD customers.

ISAG provides technological support for all levels of information systems, from the development of leading-edge technologies to the maintenance and modification of older legacy systems. It offers comprehensive support to its customers, including the development, maintenance, integration, and sustainment of their combat support information systems.

ISAG enhances readiness during war and peace by sustaining global combat support information systems, which provide information to combat forces where and when they need it, thus improving the forces' response capability.

Two Air Force activities act as one CDA under the command of the Air Force Materiel Command, Electronic Systems Center (ESC) at Hanscom AFB, Massachusetts. The two activities are the Materiel Systems Group (MSG), located at Wright-Patterson AFB, Ohio, and the Standard Systems Group (SSG), located at Maxwell AFB-Gunter Annex, Alabama.

Customers, Products, and Services

ISAG provides, through the CDA, information products and services via two business lines—the information technology solutions line and the Commercial Information Technology Product Area Directorate (CITPAD).

The information technology solutions business line provides the development and operational sustainment of automated information and communications systems on existing hardware and software platforms for AFMC-level logistics support systems and Air Force base-level standard support systems. This includes a 24-hour, seven-day help desk for field users to call for hardware and software systems support. Additionally, this business line provides automated information and communications systems requirements analysis, system design, development, testing, integration, implementation support, and documentation services on mainframe, mid-tier, and personal computer hardware/software platforms for Air Force and DoD customers using the Software Engineering Institute Capability Maturity Model processes.

The CITPAD business line provides other authorized information system services or products through the acquisition and operation of the CITPAD commodity contracts for the Department of the Air Force and other DoD agencies.

ISAG may furnish these products or services to other agencies and private parties as authorized by law. These authorized services are provided by either organic or contract sources.

The product support business line provides CDA services based on: (1) service-level agreements (SLAs) with known customers and (2) the sale of direct billable hours. However, the CITPAD business line provides goods and services (e.g., personal computers and local area network hardware and services, including installations worldwide) to thousands of individual customers across the Air Force and DoD, making SLAs and the use of direct billable hours impractical.

Instead, the CITPAD portion of ISAG contributes to overall organization revenue by collecting a surcharge on orders for equipment and services required by users of contracts or blanket purchase agreements (BPAs).

As previously mentioned, ISAG operates in two major locations, each having slightly different market sectors. MSG, headquartered at Wright-Patterson AFB, Ohio, with two operating locations at the Oklahoma City Air Logistics Center (OC-ALC) and the Ogden Air Logistics Center (OO-ALC), has historically concentrated on depot management information systems. SSG, headquartered at Maxwell AFB-Gunter Annex, Alabama, has focused on flight line management information systems.

Performance Measures

Deficiency Reports and Software Releases

Software deficiency reports (DIREPs) are one measure of quality software production. Software releases are software components issued to fix DIREPs and to make minor enhance-





ments as part of sustainment. Priority 1 DIREPs (emergency calls) and priority 2 DIREPs (routine calls) are reported monthly as quantitative measurements. The number of priority 1 and priority 2 DIREPs per 100,000 lines of code are identified, reported monthly, and corrected. Feedback is provided to ISAG developers and customers about the corrective action.

FY 2001 performance is as follows:

- ▶ **Software Releases**—98 percent on time
- ▶ **Priority 1 Deficiency Reports**—67 percent closed within 48 hours
- ▶ **Priority 2 Deficiency Reports**—82 percent closed within 45 days.

AFMC certifies that these performances are all within the acceptable limitations.

Earned Value Management (EVM)

Earned Value Management (EVM) is a management tool that allows customer and software factory/contractor program

managers to assess a project's technical, cost, and schedule progress. An EVM system ensures that program managers receive cost and schedule performance data that:

- ▶ Relates time-phased budgets to specific contract tasks and/or statements of work
- ▶ Indicates work progress
- ▶ Properly relates cost, schedule, and technical accomplishment
- ▶ Is valid, timely, and auditable
- ▶ Supplies managers with information at a practical level of summarization
- ▶ Is derived from the same internal EVM systems used by the contractor to manage the contract

Initial implementation of EVM on ISAG software programs began in May 1998. The FY 2001 ISAG cost variance and schedule variance were better than the standard of 13 percent for the entire fiscal year.

Financial Measures

ISAG Financial Performance Measures

Financial Performance Measures	ISAG FY 2001 Goal	ISAG FY 2001 Result	ISAG FY 2002 Goal
Revenue	\$588,800,000	\$554,200,000	\$600,500,000
Cost of Operations	\$594,700,000	\$561,100,000	\$604,000,000
Net Operating Result (NOR)	(\$5,900,000)	(\$6,900,000)	(\$3,500,000)

Net Operating Result

The net operating result (NOR) is a primary indicator of ISAG's financial effectiveness. The computation for NOR is revenue minus cost of operations. For FY 2001, a \$5.9 million loss was the NOR target to achieve a zero accumulated operating result (AOR) by FY 2002. ISAG recorded a NOR loss of \$6.9 million in FY 2001.

Revenue

Revenue is earned through the sale of direct billable labor hours at the ISAG composite rate; direct reimbursements for pass-through contract efforts and extraordinary expenses (e.g., mission-unique travel, equipment, and supplies); and the collection of CITPAD surcharges. Customer funding cuts and new business did not materialize as planned, resulting in a revenue variance of \$34.6 million.

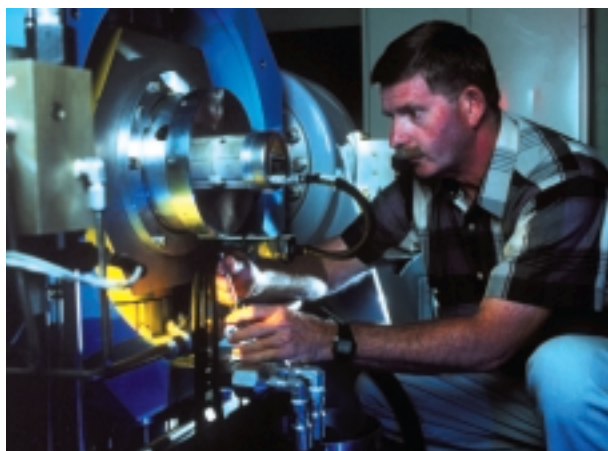
Cost of Operations

For ISAG, cost of operations measures the resources consumed in filling customer orders. These costs include labor and non-labor expenses, both direct and overhead. As stated above, customer funding cuts and program terminations drive the variance in cost of operations (\$34.6 million).

Goals and Initiatives—Efforts to Improve Financial Management

CDA will provide mission support services to the Air Force and other customers in a multitude of functional areas, including supply, maintenance, financial management, medical, transportation, munitions, logistics, plans, contracting, and military justice. The goal of the following strategic initiatives is to efficiently and effectively reduce costs and keep the workforce trained to remain competitive through FY 2007. AFMC objectives for the Expeditionary Air and Space Force support weapon systems, cost reductions, work force training, and infrastructure developed in the seven ISAG initiatives:

- ▶ Objective 1: Meet or exceed commitments
- ▶ Objective 2: Improve customer satisfaction
- ▶ Objective 3: Protect information systems
- ▶ Objective 4: Meet NOR and AOR targets
- ▶ Objective 5: Optimize workforce
- ▶ Objective 6: Improve communications
- ▶ Objective 7: Properly size capital infrastructure.



Cash Management

The Air Force Working Capital Fund (AFWCF) ended FY 2001 with \$918.5 million in cash. The FY 2001 revised, end-of-year budget projection was \$326.9 million. The cash increase was largely due to a \$500-million-dollar advance billing of DMAG customers in September 2001. The following is a summary of the cash changes:

- ▶ The DMAG cash balance increased \$190 million in FY 2001. The increase is attributable to the advance billing mentioned above.
- ▶ The General Support Division cash balance decreased by \$97.4 million in FY 2001. The decrease was the result of purchases exceeding sales and the effect of a negative surcharge.
- ▶ The Materiel Support Division cash balance increased \$320.2 million in FY 2001. This increase was primarily due to gains in the overhead account, timely collection of receivables, and reduction of repair expense losses.

The DoD cash management policy recommends maintaining the minimum cash balance necessary to meet both operational and disbursement requirements in support of the capi-

tal program. Cash generated from operations is the primary means of maintaining adequate cash levels. The ability to generate cash is dependent on setting rates to recover full costs, including prior-year losses, accurately projecting workloads, and meeting established operational goals.

Effective cash management is directly dependent on the availability of accurate and timely data on cash levels and operational results. Cash levels should maintain at least seven to 10 days of operational costs as well as cash adequate to meet six months of capital disbursements. The recommended cash range for FY 2001 was \$705 million (seven days) and \$977 million (10 days). At the end of the fiscal year, the amount of cash was adequate to meet standards set by the Office of the Secretary of Defense.

Cash management efforts continue to focus on analyzing data and developing tools to identify changes in cash. Although currently available data is outdated for current needs, accuracy has been improving. AFMC completed a statement of sources and uses of cash in FY 2000 and implemented use of the statements to identify areas of cash increases and drains. Work is continuing with regard to identifying and correcting processes that cause cash drains.